

# Release Notes for the FastHub 400 10/100 Series

#### January 2003

These release notes include important information about the FastHub 400 10/100 series (hereafter referred to as the FastHub 400) and any limitations, restrictions, and caveats that apply to it.

For the complete list of FastHub 400 10/100 series documentation, see the "Related Documentation" section on page 5.

The tracking numbers for some items in this document are added for your convenience.

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## **Documentation Notes**

The installation and configuration guide incorrectly lists the CISCO-SIBU-SIMPLE-UPGRADE-MIB.my MIB as a supported MIB. The hub does not support this MIB.



# Limitations

The FastHub 400M can store up to 4096 MAC addresses in memory. The optional switched uplink modules can store up to 1536 MAC addresses. If there is excessive flooding of unicast packets on these devices, your hub or module might have reached its maximum. To clear the MAC address table, power-cycle the hub. [CSCdk90641]

# **Usage Guidelines**

- Some 400 FastHubs have improperly terminated 100-MB TXEN signal lines at the extension port. If this problem occurs when no extension module is present, 100-MB data can be corrupted. Firmware releases 1.00.02 and later detect the absence of an extension module and isolate the extension port from the hub.
- You must purchase and use the FastHub 400 stacking cable (part number WS-C400-CAB-EXP) to create a hub stack of interconnected FastHub 400 models. Do not use any other cable for this purpose. You can order this cable from your Cisco representative or reseller.
- A FastHub 400 does not support modem connections over a telephone line to a PC connected to another modem by a telephone line. To connect to a FastHub 400 using a modem, refer to your modem manual for the correct configuration command syntax. [CSCdk83978]
- Before connecting a FastHub 400M model to a modem, configure your modem to ignore input from the data terminal equipment (DTE) during dial-out or dial-in. Without this precaution, there is a small chance that the modem could disconnect. Refer to your modem manual for the correct configuration command syntax. [CSCdk83009]

## **Stacking Guidelines**

When changing or moving units within a managed hub stack, note these configuration rules.

- The stacking cable connectors are lockable. When you insert the stacking cable, be sure that it snaps into place.
- The stacking cables are not hot-swappable. You must power down the hub stack before connecting or disconnecting a stacking cable. If you connect or disconnect a stacking cable while the power is on, power-cycle the stack to ensure correct stack-management operation.
- The primary management hub is referred to as the M1 hub. The secondary management hub is referred to as the M2 hub.
- The M1 hub continuously stores the configuration settings for these stack elements:
  - Itself.
  - The three hubs that it has most recently managed (whether or not the hubs are currently being managed).
  - TX and FX switched uplink modules for itself and for each of the three hubs that it has most recently managed.

This means that if you remove a hub (other than the M1 hub) or module from the stack and later reinstall the same device, the M1 hub reconfigures that device with its former configuration in the stack. Whether or not this happens depends upon whether the stored configuration for that particular device has been retained by the M1 hub or overwritten in subsequent changes.

#### Stacking Example

In a stack of hubs where hub 1 is the FastHub 400 M1 hub and hubs 2, 3, and 4 are FastHub 400 unmanaged hubs, these conditions apply:

- If you remove hub 3 and replace it with a new hub (hub A), the new hub keeps its default configuration. (See Table 1.)

#### Table 1

Original Stack	Replaced with	New Stack
Hub 1		Hub 1 (store M1)
Hub 2		Hub 2 (store 2)
(Hub 3)>	Hub A>	Hub 3 (store A: default)
Hub 4		Hub 4 (store 4)

- If hub 4 is removed for troubleshooting purposes and later reinstalled in the second position in the stack, the M1 hub recognizes the serial number of that hub as belonging to one of its saved configurations and applies the previously saved hub 4 configuration. (See Table 2.)

#### Table 2

Original Stack	Reinstalled	New Stack
Hub 1		Hub 1 (store M1)
Hub 2>	Hub 4>	Hub 2 (store 4: saved)
Hub 3A>		Hub 3 (store 2: saved)
(Hub 4)		Hub 4 (store 3A: saved)

#### Clearing the NVRAM of a Management Hub in a Redundant Stack

To reset the nonvolatile random-access memory (NVRAM) configuration settings of one or both management hubs in a redundant stack configuration, note the following guidelines.

Note

The primary management hub is referred to as the M1 hub. The secondary management hub is referred to as the M2 hub.

- When a second FastHub 400 managed hub is added to a stack, the new hub, referred to as the M2 hub, learns the saved configuration settings for the stack from the M1 hub. If the M1 hub fails, the M2 hub uses the saved configuration of the M1 hub.
- The delete **nvram command** only resets the NVRAM of the M1 hub. If an M2 hub is connected to the stack, the contents of the M2 hub NVRAM will immediately be copied to the NVRAM of the M1 hub. To ensure you reset the NVRAM of a FastHub 400, use one of these methods:
  - To clear the NVRAM of the M1 hub, disconnect the stack cable between the M1 hub and the M2 hub, connect a console cable to the M1 hub, and use the **delete nvram** command.

- To clear the NVRAM of the M2 hub, disconnect the stack cable between the M1 hub and the M2 hub, connect a console cable to the M2 hub, and use the **delete nvram** command. [CSCdk91393]
- You must power down the stack before resetting either or both management hubs. To do this, unplug the stacking cable from the management hubs that you want to reset.
- Connect the hub to a management station.
- Power on the hub and access the command-line interface (CLI).
- Refer to the online *FastHub 400 10/100 Series Command Reference* for information about accessing the CLI. See the "Obtaining Documentation" section of this document for information about locating this document through Cisco.com.
- Use the CLI delete nvram command to reset either or both management hubs to their default values.
- Refer to the online reference *FastHub 400 10/100 Series Command Reference* for more information about this command.
- The management hub that is powered on first becomes the new M1 hub in the stack because the hub with the longest up time is by default the M1 hub.

Note

If you delete the NVRAM configuration settings for one management hub and not the other, be sure to power on the management hub with the *deleted configuration first*. This prevents the redundant management hub from copying its saved configuration to the hub whose configuration you just deleted.

## **Resolved** Caveats

These caveats were resolved in these releases:

- "Resolved Caveats in Release 1.00.08" section on page 4
- "Resolved Caveats in Release 1.00.06" section on page 5
- "Resolved Caveats in Release 1.00.04" section on page 5
- "Resolved Caveats in Release 1.00.03" section on page 5

#### **Resolved Caveats in Release 1.00.08**

This configuration caveat was resolved in Release 1.00.08:

• CSCdw69907

The Cisco FastHub 400 is susceptible to Simple Network Management Protocol (SNMP) vulnerabilities. These vulnerabilities can be easily and repeatedly demonstrated with the use of the University of Oulu Secure Programming Group (OUSPG) "PROTOS" Test Suite for SNMPv1. The test suite is generally used to analyze a protocol and produce messages that probe various design limits within an implementation of a protocol. Test packets containing overly-long or malformed object identifiers and other combinations of exceptional values in various fields can be programmatically generated and then transmitted to a network device under test. The PROTOS test suite for SNMPv1, as distributed, contains approximately 53,000 individual test cases.

Further details are described in the advisory at this link:

http://www.cisco.com/warp/public/707/cisco-malformed-snmp-msgs-non-ios-pub.shtml

### **Resolved Caveats in Release 1.00.06**

This problem was resolved in Release 1.00.06:

• CSCdv15665

You no longer lose connectivity across the uplink module when moving to a new port on the same FastHub 400 or to a port on a different FastHub 400.

### **Resolved Caveats in Release 1.00.04**

This problem was resolved in Release 1.00.04:

• CSCdr79923

An enable password is no longer limited to less than eight characters.

### **Resolved Caveats in Release 1.00.03**

This problem was resolved in Release 1.00.03:

• CSCdr17179

Using Cisco Discovery Protocol (CDP) with a FastHub 400M no longer occasionally locks the console.

## **Related Documentation**

These documents provide complete information about the hub and are available from this Cisco.com site:

http://www.cisco.com/univercd/cc/td/doc/product/fhubs/fh400/index.htm

- FastHub 400 10/100 Series Cabling and Start Up
- FastHub 400 10/100 Series Installation and Configuration Guide
- Installation Notes for the FastHub 400 10/100 Series Switched Uplink Modules
- FastHub 400 10/100 Series Command Reference (online only)
- FastHub 400 10/100 series Hub Manager online help

## **Obtaining Documentation**

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

## Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

http://www.cisco.com/univercd/home/home.htm

You can access the Cisco website at this URL:

http://www.cisco.com

International Cisco web sites can be accessed from this URL:

http://www.cisco.com/public/countries\_languages.shtml

## **Documentation CD-ROM**

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which may have shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Registered Cisco.com users can order the Documentation CD-ROM (product number DOC-CONDOCCD=) through the online Subscription Store:

http://www.cisco.com/go/subscription

#### **Ordering Documentation**

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es\_inpck/pdi.htm

You can order Cisco documentation in these ways:

 Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

http://www.cisco.com/en/US/partner/ordering/index.shtml

• Registered Cisco.com users can order the Documentation CD-ROM (Customer Order Number DOC-CONDOCCD=) through the online Subscription Store:

http://www.cisco.com/go/subscription

• Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

#### **Documentation Feedback**

You can submit comments electronically on Cisco.com. On the Cisco Documentation home page, click **Feedback** at the top of the page.

You can e-mail your comments to bug-doc@cisco.com.

You can submit your comments by mail by using the response card behind the front cover of your document or by writing to the following address:

Cisco Systems Attn: Customer Document Ordering 170 West Tasman Drive San Jose, CA 95134-9883

We appreciate your comments.

# **Obtaining Technical Assistance**

Cisco provides Cisco.com, which includes the Cisco Technical Assistance Center (TAC) Website, as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from the Cisco TAC website. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC website, including TAC tools and utilities.

### Cisco.com

Cisco.com offers a suite of interactive, networked services that let you access Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com provides a broad range of features and services to help you with these tasks:

- · Streamline business processes and improve productivity
- · Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- · Register for online skill assessment, training, and certification programs

To obtain customized information and service, you can self-register on Cisco.com at this URL:

http://www.cisco.com

### **Technical Assistance Center**

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two levels of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The avenue of support that you choose depends on the priority of the problem and the conditions stated in service contracts, when applicable.

We categorize Cisco TAC inquiries according to urgency:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

#### **Cisco TAC Website**

You can use the Cisco TAC website to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC website, go to this URL:

#### http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC website. Some services on the Cisco TAC website require a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

http://tools.cisco.com/RPF/register/register.do

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC website, you can open a case online at this URL:

http://www.cisco.com/en/US/support/index.html

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC website so that you can describe the situation in your own words and attach any necessary files.

#### **Cisco TAC Escalation Center**

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

## **Obtaining Additional Publications and Information**

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

• The *Cisco Product Catalog* describes the networking products offered by Cisco Systems as well as ordering and customer support services. Access the *Cisco Product Catalog* at this URL:

http://www.cisco.com/en/US/products/products\_catalog\_links\_launch.html

• Cisco Press publishes a wide range of networking publications. Cisco suggests these titles for new and experienced users: *Internetworking Terms and Acronyms Dictionary, Internetworking Technology Handbook, Internetworking Troubleshooting Guide*, and the *Internetworking Design Guide*. For current Cisco Press titles and other information, go to Cisco Press online at this URL:

http://www.ciscopress.com

• *Packet* magazine is the Cisco monthly periodical that provides industry professionals with the latest information about the field of networking. You can access *Packet* magazine at this URL:

http://www.cisco.com/en/US/about/ac123/ac114/about\_cisco\_packet\_magazine.html

• *iQ Magazine* is the Cisco monthly periodical that provides business leaders and decision makers with the latest information about the networking industry. You can access *iQ Magazine* at this URL:

http://business.cisco.com/prod/tree.taf%3fasset\_id=44699&public\_view=true&kbns=1.html

• *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in the design, development, and operation of public and private internets and intranets. You can access the *Internet Protocol Journal* at this URL:

http://www.cisco.com/en/US/about/ac123/ac147/about\_cisco\_the\_internet\_protocol\_journal.html

 Training—Cisco offers world-class networking training, with current offerings in network training listed at this URL:

http://www.cisco.com/en/US/learning/le31/learning\_recommended\_training\_list.html

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